# TWO NEW SPECIES OF MITES (ACARINA: MESOSTIG-MATA: ASCAIDAE) ASSOCIATED WITH BARK-BORING BEETLES FROM SOUTH AUSTRALIA

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Fig. 1-2.

#### Family ASCAIDAE Ouds, 1906.

Genus Dendrolaelaps Halbert 1915.

Clare Island Survey, Pt. 39 II Acarinida; Terrestrial and Marine, in Proc. Roy. Irish Acad., 31, 68-69, pl. 6, fig. 15 a-d.

Type Dendrolaelaps oudemansi sp. n.

DENDROLAELAPS ADELAIDEAE Sp. n.

#### Fig. 1 A-G.

As with the other known species of this genus, viz., oudemansi Halbert 1915, armatus (Kramer) 1886, and quadrisetis (Berlese) 1920, the following species are very small, white, and found amongst the frass of bark-boring beetles of the genus Ips and its allies.

Female. Length of idiosoma  $325\mu$ , greatest width on level of eoxae II,  $182\mu$ . Shape, elongate with almost straight sides, and rounded anteriorly and posteriorly. Colour in life whitish. Dorsum divided into two by a line between coxae III and IV; on the anterior shield the setae are  $14\mu$  to  $16\mu$  long except a pair behind the 4 vertical, and one on each shoulder between coxae II and III which are  $28\mu$  long; on posterior shield the two longitudinal rows of setae are  $14\mu$  to  $16\mu$  long, the laterals from  $25\mu$  to  $35\mu$ ; posteriorly with 3 pairs of longer setae, the anterior laterals  $56\mu$  long and of the two extreme pairs the inner pair  $84\mu$ , the outer pair to  $100\mu$  long. Venter: the sternal shield as figured, ending posteriorly at posterior point of coxae III; genital shield as figured, with straight posterior margin and 1 pair of setae; a pair of elliptical inguinal shields behind coxae IV; anal shield wider than long and narrower anteriorly than posteriorly, widely separated from genital shield. Legs shorter than body; I slender,  $312\mu$  long, II slightly thicker,  $221\mu$  long, without any specialized

armature; III  $221\mu$  long, 1V  $234\mu$  long; coxae II narrow, and much broader than trochanter. Gnathosoma as figured, epistome (tectum) trispinous; chelicerae short and stumpy, movable finger with 4 prominent retrorse teeth; fixed finger with a strong subapical and subbasal tooth, and finely serrate in between.

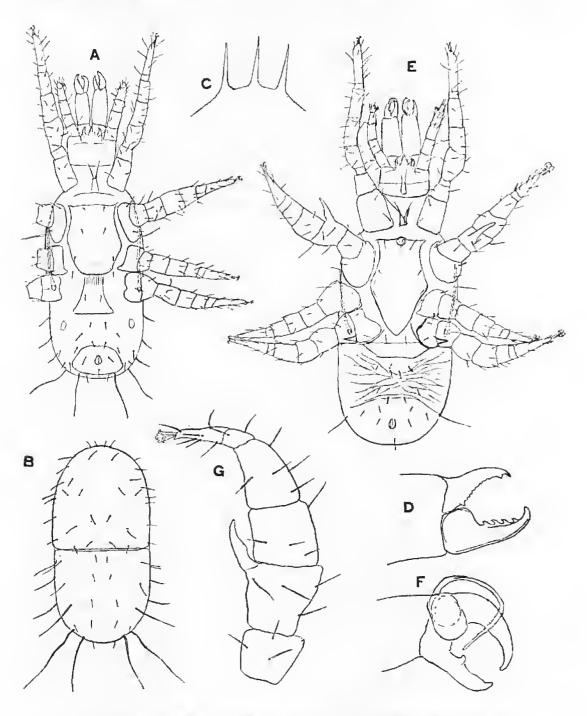


Fig. 1. Dendrolaelaps adelaideae sp. n. A-D, female: A venter, B dorsum, C tectum, D chelicerae; E-G, male: E venter, F chelicerae, G Leg II.

Male. Shape and colour as in female. Size from the material available larger than in female. Length of idiosoma  $416\mu$ , width  $195\mu$ . Dorsum as in female, with setae of similar lengths. Venter; sternal and genital shields as figured; anterior of anus is an indistinct transverse line which seems to suggest an incipient demarcation of an anal shield as figured, between this line and posterior of genital shield are some radiating lines. Legs: II much thicker than I and III, and IV also thicker, II armed on basifemur with a long and strong ventral spur, but no other incrassations, IV with a posterior spur on coxae; I  $312\mu$  long, II  $269\mu$ , III  $221\mu$ , IV  $286\mu$ . Gnathosoma as in female. Chelicerae as figured, fixed finger with a strong subbasal tooth; movable finger unarmed, with a long slender spermatophore carrier.

Remarks. This species differs markedly from the genotype oudemansi, in the shape of the anal or ventri-anal shield of the female, and the posterior margin of the sternal shield in the same sex. In the male, the second leg lacks the small incrassations or spurs on the other segments than the femur.

From the European cornutus the female differs in the shape of the ventrianal and inguinal shields, and the posterior end of the sternal shield. In the male, it lacks the small boss-like incrassations on the genu and tibia of leg II present in cornutus, and is different from both oudemansi and cornutus in having a spur on coxae IV.

Locality. The holotype 2, and two paratype 2 2 and the allotype 3 from frass of bark-boring beetles, Adelaide, May, 1952. In the collection of the South Australian Museum,

### DENDROLAELAPS CONCINNA Sp. n.

## Fig. 2 A-B.

Female. Shape as in preceding species. Colour in life whitish. Dorsum as figured, divided in two on level of coxae IV, anterior shield  $195\mu$  long, posterior  $247\mu$ ; dorsal setae as figured, of similar lengths to preceding species. Venter: as figured; sternal shield ending between coxae III and IV with concave posterior margin, and the 3rd and 4th pairs of setae close together; genital shield as figured with 1 pair of setae; ventri-anal shield as shown, with irregularly scolloped anterior and lateral margins, widest in line of anus, with 6 setae in addition to anal setae, adamal setae longer,  $31\mu$  than post-anal  $17\mu$ ; inguinal shields lenticular and longer than in adelaideae, all other ventral setae including sternal  $14\mu$  long. Legs: I longer and more slender than others,  $351\mu$  long, II  $260\mu$ , III  $234\mu$ , IV  $300\mu$ ; tarsi with short ambulaera and paired claws. Epistome trispinous. Dentition of chelicerae not observable.

Locality. A single female from frass under bark infested with bark-boring beetles, Adelaide, May, 1951. In the collection of the South Australian Museum.

Remarks. Differs from preceding species in the shape and size of the ventri anal shield.

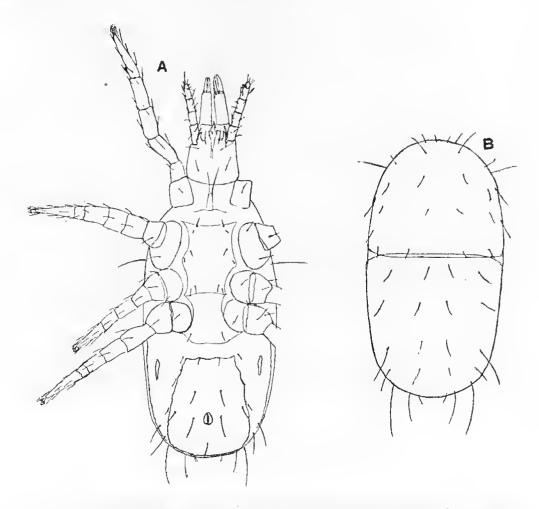


Fig. 2. Dendrolaelaps concinna sp. n. Female: A venter, B dorsum.